

CLAIMS

1. Starter for an internal combustion engine comprising
5 an electric motor (11) having a cylindrical housing (15)
supporting the stator (12) and a rotor (13) coupled to an
output shaft (43) for the rotational driving of a starter
head (30) with the interposing of an epicyclic gearbox
(45), the said gearbox comprising:

10 - a ring gear (46) having an internally toothed
cylindrical annular skirt (61), and a radial flange (62)
provided with a hole (63) for coaxial passage of the
output shaft (43),

15 - and means of axial centring of the said ring gear (46)
in the support (16) of the starter,

characterised in that the ring gear (46) of the gearbox
20 (45) has a first abutment face (70) situated in the same
plane as the connection interface between the support
(16) and the housing (15).

2. Starter according to claim 1, characterised in that
25 the connection interface is delimited between a second
abutment face (71) of the support (16) in axial abutment
against a third abutment face (72) of the housing (15).

3. Starter according to claim 2, characterised in that
30 the ring gear (46) comprises a collar (73) equipped with
the first abutment face (70) coming into contact with the
support (16).

4. Starter according to claim 3, characterised in that the collar (73) projects from the skirt (61) of the ring gear (46) in order to provide the centring of the housing (15) and ring gear (46) on the support (16).

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5. Starter according to claim 3, characterised in that the ring gear (46) of the gearbox (45) is locked in axial translation by the said collar (73) and by a stop protrusion (74) on the housing (15).

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6. Starter according to claim 3, characterised in that the centring collar (73) is moulded directly with the ring gear (46).

15 7. Starter according to claim 1, characterised in that it comprises a starter head (30) provided with a driver (51), a control lever (41) in engagement with the driver (51) and a support (16) receiving a control lever (41), and in that the ring gear (46) of the gearbox (45)
20 comprises an extension conformed so as to fulfil a function of articulation of the control lever.

8. Starter according to claim 1, characterised in that it comprises a starter head (30) provided with a driver
25 (51), a control lever (41) in engagement with the driver (51) and a support (16) receiving a control lever (41), and in that the ring gear (46) of the gearbox (45) comprises an extension conformed as a male element engaged in a cavity (69) in the support (16) receiving a
30 control lever (41).